## **Abstract**

The present invention relates to artificial receptors and arrays or microarrays of artificial receptors or candidate artificial receptors. Each member of the array includes a plurality of building block compounds, for example, immobilized in a spot on a support. The present invention also includes the building blocks, combinations of building blocks,

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arrays of building blocks, and receptors constructed of these building blocks together with a support. The present invention also includes methods of making and using these arrays and receptors.

The present invention also relates to artificial receptors, arrays or microarrays of
artificial receptors or candidate artificial receptors, methods of and compositions for making
them, and methods of using them. Each artificial receptor includes a plurality of building
block compounds, which can be mobile or reversibly immobilized on a surface.